AMENDMENT

Please replace all prior versions and listings of claims in the Application with the following Listing of Claims.

Listing of Claims

1.   (*Currently Amended*) A method for agent-based monitoring of network devices in an enterprise network, comprising:

selecting one of the network devices from the enterprise network, each network device ~~associated with one of a plurality of device classes~~ having characteristics;

selecting one of a plurality of agent templates based on ~~the associated device class~~ one or more of the characteristics of the selected network device, the agent template comprising a ~~class definition~~ hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network device; and

instantiating an agent object from the object class of the agent template that corresponds to the characteristics of the selected network device ~~based on the class definition~~, the instantiated agent object operable to monitor hardware characteristics of the network device.

2.   (*Currently Amended*) The method of claim 1, ~~the network device associated with~~ wherein the characteristics of the network device include at least one Management Information Base (MIB) parameter.

3.   (*Currently Amended*) The method of claim ~~2, the agent object monitoring the network device based on the one or more MIB parameters~~ 1, wherein the characteristics include one or more of a type of network device, an identity of a vendor, a model number, a product line, or a hardware characteristic.

4.   (*Currently Amended*) The method of claim 1, wherein monitoring includes

~~comprises~~ retrieving information associated with ~~at least a portion~~ <u>one or more</u> of the hardware characteristics of the network device.

5.   (*Currently Amended*) The method of claim ~~1~~ <u>4</u>, ~~each~~ <u>wherein the</u> hardware characteristic<u>s of the network device</u> ~~of the network device selected from the group consisting of~~ <u>include one or more of</u>:

memory usage;

chassis temperature;

Central Processing Unit (CPU) usage;

fan status;

module status; ~~and~~ <u>or</u>

power supply status.

6.   (*Currently Amended*) The method of claim ~~1~~ <u>4</u>, ~~further comprising~~ <u>wherein monitoring includes</u> comparing <u>a threshold value to the retrieved information associated with one or more</u> ~~at least one~~ of the hardware characteristics ~~to an associated threshold value~~.

7.   (*Currently Amended*) The method of claim 6, further comprising automatically communicating an alert in response to the hardware characteristic violating the ~~associated~~ threshold value.

8.   (*Currently Amended*) The method of claim 1, <u>wherein</u> the ~~agent object comprising~~ <u>hierarchy of object classes includes</u> a <u>plurality of</u> parent object<u>s</u> and at least one child object <u>associated with each of the parent objects</u>, the parent object<u>s</u> ~~associated with~~ <u>corresponding to different embodiments of a first characteristic of</u> the network device and each child <u>object being</u> associated with ~~one of the hardware~~ <u>different embodiments of a second</u> ~~characteristics~~ <u>characteristic and the embodiment of the first characteristic that corresponds to the parent object associated with the child object</u>.

9.   (*Currently Amended*)Software comprising executable instructions stored on a machine-readable medium, the software operable to:

  select one of the network devices from the enterprise network, each network device ~~associated with one of a plurality of device classes~~ having characteristics;

  select one of a plurality of agent templates based on ~~the associated device class~~ one or more of the characteristics of the selected network device, the agent template comprising a ~~class definition~~ hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network device; and

  instantiate an agent object ~~based on the class definition~~ from the object class of the agent template that corresponds to characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the network device.

10.   (*Currently Amended*) The software of claim 9, ~~the network device associated with~~ wherein the characteristics of the network device include at least one MIB parameter.

11.   (*Currently Amended*) The software of claim ~~10, the agent object monitoring the network device based on the one or more MIB parameters~~ 9, wherein the characteristics include one or more of a type of network device, an identity of a vendor, a model number, a product line, or a hardware characteristic.

12.   (*Currently Amended*) The software of claim 9, wherein ~~the agent object~~ monitoring hardware characteristics includes ~~comprises the software operable to retrieve~~ retrieving information associated with ~~at least a portion~~ one or more of the hardware characteristics of the network device.

13.   (*Currently Amended*) The software of claim ~~9~~ 12, ~~each~~ wherein the hardware

characteristics of the network device ~~selected from the group consisting of~~ includes one or more of:

memory usage;

chassis temperature;

Central Processing Unit (CPU) usage;

fan status;

module status; ~~and~~ or

power supply status.

14. (*Currently Amended*) The software of claim ~~9~~ 12, ~~further operable to compare~~ wherein monitoring hardware characteristics includes comparing a threshold value with at least one of the hardware characteristics ~~to an associated threshold value~~.

15. (*Currently Amended*) The software of claim 14, further operable to automatically communicate an alert in response to the at least one of the hardware characteristics violating the ~~associated~~ threshold value.

16. (*Currently Amended*) The software of claim 9, wherein the agent object comprising a parent object and at least one child object, the parent object associated with the network device and each child associated with one of the hardware characteristics.

17. (*Currently Amended*) A system for agent-based monitoring of network devices in an enterprise network, comprising:

memory operable to store information associated with a plurality of network devices in the enterprise network, the information stored in the memory comprising characteristics of each of the plurality of network devices; and

one or more processors collectively operable to:

select one of the network devices from the enterprise network, ~~each network device associated with one of a plurality of device classes~~;

select one of a plurality of agent templates based on ~~the associated device class~~ one or more of the characteristics of the selected network device, the agent template comprising a ~~class definition~~ hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network device; and

instantiate an agent object ~~based on the class definition~~ from the object class of the agent template that corresponds to the characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the network device.

18. (*Currently Amended*) The system of claim 17, ~~the network device associated with~~ wherein the characteristics of the network device include at least one MIB parameter.

19. (*Currently Amended*) The system of claim ~~18, the agent object monitoring the network device based on the one or more MIB parameters~~ 17, wherein the characteristics include one or more of a type of network device, an identity of a vendor, a model number, a product line, or a hardware characteristic.

20. (*Currently Amended*) The system of claim 17, wherein the agent object monitoring include ~~comprises~~ processors operable to retrieve information associated with ~~at least a portion~~ one or more of the hardware characteristics of the network device.

21. (*Currently Amended*) The system of claim ~~17~~ 20, ~~each~~ wherein the hardware characteristics of the network device include one or more of ~~of the network device selected from the group consisting of~~:
memory usage;
chassis temperature;
Central Processing Unit (CPU) usage;

fan status;

module status; ~~and~~ or

power supply status.

22.   (*Currently Amended*) The system of claim ~~17~~ 20, wherein the ~~one or more processors further operable to~~ agent object compares <u>s</u> ~~at least one~~ <u>a threshold value to the retrieved information associated with one or more</u> of the hardware characteristics ~~to an associated threshold value~~.

23.   (*Currently Amended*) The system of claim 22, <u>wherein</u> the ~~one or more processors further operable to~~ <u>agent object</u> automatically communicate<u>s</u> an alert in response to ~~the at least one~~ <u>one or more</u> of the hardware characteristics violating the ~~associated~~ threshold value.

24.   (*Currently Amended*) The system of claim 17, <u>wherein</u> the ~~agent object comprising~~ <u>hierarchy of object classes includes</u> a <u>plurality</u> parent object<u>s</u> and at least one child object <u>associated with each of the parent objects</u>, the parent object<u>s</u> ~~associated with~~ <u>corresponding to different embodiments of a first characteristic of</u> the network device and each child <u>object being</u> associated with ~~one of the hardware characteristics~~ <u>different embodiments of a second characteristic that corresponds to the parent object associated with the child object</u>.

25.   (*Currently Amended*) A method for agent-based monitoring of switches in an enterprise network, comprising:

        selecting one of the switches from the enterprise network, each switch ~~associated with one of a plurality of device classes~~ <u>having characteristics</u>;

        selecting one of a plurality of agent templates based on ~~the associated device class~~ <u>one or more of the characteristics</u> of the selected switch, the agent template comprising a ~~class definition~~ <u>hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network</u>

device; and

instantiating an agent object ~~based on the class definition~~ from the object class of the agent template that corresponds to the characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the selected switch by~~;~~ comparing at least one of the hardware characteristics to ~~an associated~~ a threshold value~~;~~, and

automatically communicating an alert in response to the at least one of the hardware characteristics violating the ~~associated~~ threshold value.

26.   (*Currently Amended*) The software of claim 9, the ~~device class~~ characteristics comprising one ~~or more~~ of:

a device type;

a device vendor;

a hardware characteristic;

a model number; or

a product line.

27.   (*Currently Amended*) The software of claim 9, the software further operable to:

transmit using Simple Management Network Protocol (SNMP) a request for a Management Information Base (MIB) object from the selected network device, wherein the MIB object identifies a type of the network device; and

identify a class table containing a plurality of agent templates wherein the one of the plurality of agent templates is selected from the class table ~~using~~ based on the type of the network device.